

ERWENT-ACC-NO: 2003-383374

DERWENT-WEEK: 200355

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**TITLE:** Detection system, for the study of biological samples, comprises the breakdown of light emerging from sample points/point distributions to form an alpha stack for the spectral distribution to be measured by separate detection channels

**INVENTOR:** TILLE, S; WOLLESCHENSKY, R; ZIMMERMANN, B

**PATENT-ASSIGNEE:** ZEISS JENA GMBH CARL[JENA], TILLE S[TILLI], WOLLESCHENSKY R[WOLLI], ZIMMERMANN B[ZIMMI]

**PRIORITY-DATA:** 2001DE-1051217 (October 16, 2001)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20030151741 A1	August 14, 2003	N/A	000	G01N 021/64
DE 10151217 A1	April 17, 2003	N/A	027	G01N 021/25
EP 1308715 A1	May 7, 2003	G	000	G01N 021/64
JP 2003185581 A	July 3, 2003	N/A	014	G01N 021/64

**DESIGNATED-STATES:** AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

**APPLICATION-DATA:**

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US20030151741A1	N/A	2002US-0057571	January 24, 2002
DE 10151217A1	N/A	2001DE-1051217	October 16, 2001
EP 1308715A1	N/A	2002EP-0020864	September 18, 2002
JP2003185581A	N/A	2002JP-0294757	October 8, 2002

**INT-CL (IPC):** G01J003/18, G01N021/25, G01N021/64, G02B021/00, G06T011/00

**ABSTRACTED-PUB-NO:** DE 10151217A

**BASIC-ABSTRACT:**

**NOVELTY -** Detection system for the study of biological samples, comprising the breakdown of light emerging from sample points or point distributions to form

an lambda stack, where the spectral distribution is measured by separate detection channels, and the detection signals are arranged with at least one of the position co-ordinates and/or the measurement time, to be stored in memory, is new.

USE - The system is useful for the quantitative analysis of biological samples with an unmixing action, and the qualitative analysis by principal component analysis (PCA).

ADVANTAGE - The system gives detection of complete spectra for the identification, separation and arrangement of most analytical and functional sample characteristics to spatial part-structures or dynamic processes. It is also possible to give simultaneous analyses of samples with multiple fluorophores with overlapping fluorescent spectra, even with thick samples.

DESCRIPTION OF DRAWING(S) - The drawing shows block diagrams of the detection system. Diagram contains non-English language text.

Line detector DE

Angular dispersive unit DI

Electrical signals ES

Light from the sample L

Pinhole diaphragm PH

Focus lens PO

CHOSEN-DRAWING: Dwg.5/18

TITLE-TERMS: DETECT SYSTEM STUDY BIOLOGICAL SAMPLE COMPRISE BREAKDOWN LIGHT

EMERGENCE SAMPLE POINT POINT DISTRIBUTE FORM ALPHA STACK SPECTRAL DISTRIBUTE MEASURE SEPARATE DETECT CHANNEL

DERWENT-CLASS: B04 S03

CPI-CODES: B11-C07B2; B11-C07B3; B12-K04E;

EPI-CODES: S03-A02A; S03-E04A; S03-E04D;

CHEMICAL-CODES:

Chemical Indexing M6 \*01\*

Fragmentation Code

M905 P831 R511 R514 R528 R530 R533 R625

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2003-102037

Non-CPI Secondary Accession Numbers: N2003-306200